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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/814,698

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Abhinanda Sarkar

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GENERAL ELECTRIC COMPANY  
GLOBAL RESEARCH  
PATENT DOCKET RM. BLDG. K1-4A59  
NISKAYUNA, NY 12309

EXAMINER

WEIS, SAMUEL

ART UNIT

PAPER NUMBER

3695

NOTIFICATION DATE

DELIVERY MODE

10/16/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/814,698	<b>Applicant(s)</b> SARKAR ET AL.	
	<b>Examiner</b> SETH WEIS	<b>Art Unit</b> 3695	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 18-44 is/are pending in the application.
- 4a) Of the above claim(s) 39-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 18-38 is/are rejected.
- 7) ☒ Claim(s) 29-38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This is in response to Applicant's amendment filed 6 June 2009. Claims 1-11 and 18-44 were pending. Applicant cancelled claims 39-44. Applicant amended claims 1-11, 18, and 28. Claims 1-11 and 18-38 have been examined.

#### ***Claim Objections***

2. Claims 29-38 are objected to because each claims a method, but depend on independent claim 28 which was amended from a method to a computer storage device. Appropriate correction is requested.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-11 and 18-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Munoz et al., U.S. Pat. App. Pub. No. 2002/0198822 (hereinafter, Munoz).

As to claims 1 and 18, Munoz discloses computer storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps method for estimating an optimal price of a financial product (abstract, Fig. 2), the method steps comprising:  
extracting data related to the financial product from at least one data source (abstract, Fig. 1);

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generating a structured data file from the data, wherein generating the structured data file comprises defining a plurality of attributes and a plurality of price parameters related to the financial product, and wherein the plurality of price parameters comprise a price conversion probability measure and a business measure parameter associated with the financial product (abstract, ¶025, 045-50, Figs. 3, 5, 7); and estimating the optimal price associated with the financial product based on the plurality of attributes, the plurality of price parameters, the price conversion probability measure and the business measure parameter (¶020, 060-62, 070).

As to claims 2 and 19, Munoz discloses wherein the financial product comprises at least one of loans, credit cards and insurance policies, mortgages and sales finance (abstract).

As to claims 3 and 20, Munoz discloses wherein the at least one data source comprises consumer finance markets and marketing campaigns (Fig. 2).

As to claims 4 and 21, Munoz discloses wherein the extracting comprises automatically searching and downloading the data from the at least one data source at predetermined time intervals (¶009, 038).

As to claims 5 and 22, Munoz discloses wherein the plurality of attributes comprise customer attributes and account attributes associated with the financial product (abstract, Fig. 4).

As to claim 6, Munoz discloses wherein the business measure parameter comprises at least one of a contributed value measure, a volume measure, and an interest volume measure associated with the financial product (¶052, Fig. 1).

As to claim 7, Munoz discloses wherein the price conversion probability measure is a measure of a propensity of response to a price associated with the financial product (¶052, Fig. 1).

As to claim 8, Munoz discloses wherein the plurality of price parameters further comprise a price conversion rate parameter, a price rate parameter, a price term parameter, and a price processing parameter associated with the financial product (¶045-050).

As to claim 9, Munoz discloses wherein estimating the optimal price further comprises computing a plurality of price elasticity measures associated with the financial product, wherein the plurality of price elasticity measures comprise a demand elasticity measure and a supply elasticity measure associated with the financial product (¶020, 060-62, 070).

As to claim 10, Munoz discloses wherein the demand elasticity measure is a function of the price conversion probability measure and the supply elasticity measure is a function of a contributed value measure associated with the financial product (¶064, Fig. 1).

As to claim 11, Munoz discloses wherein the demand elasticity measure and the supply elasticity measure are estimated using a regression model (¶064, Fig. 1).

As to claim 23, Munoz discloses wherein the business measure parameter comprises at least one of a contributed value measure, a volume measure, and an interest volume measure associated with the financial product, and wherein the price

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conversion probability measure is a measure of a propensity of response to a price associated with the financial product (§052, Fig. 1).

As to claim 24, Munoz discloses wherein the plurality of price parameters further comprise a price conversion rate parameter, a price rate parameter, a price term parameter, and a price processing parameter associated with the financial product (§045-050).

As to claim 25, Munoz discloses wherein the optimized price decision engine further comprises a demand model and a supply model, wherein the demand model is configured to compute a demand elasticity measure and the supply model is configured to compute a supply elasticity measure associated with the financial product (§064-66).

As to claim 26, Munoz discloses wherein the demand elasticity measure is a function of the price conversion probability measure and the supply elasticity measure is a function of a contributed value measure associated with the financial product (§064-66).

As to claim 27, Munoz discloses wherein the demand elasticity measure and the supply elasticity measure are estimated using a regression model (§064-66).

As to claim 28, Munoz discloses a computer storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for displaying a plurality of pages to enable a user to view information related to estimating an optimal price associated with a financial product (abstract, Fig. 2), the method comprising:

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displaying an input screen for permitting the user to specify a plurality of attributes related to the financial product (abstract; Fig. 3, ¶045-050);

displaying a selection screen for permitting a user to specify values for a plurality of price parameters and a price conversion probability measure associated with the financial product (abstract; Fig. 3, ¶045-050);

displaying a simulation screen for permitting the user to select a business measure parameter and at least one of the plurality of attributes associated with the financial product; and displaying an output screen for permitting the user to view the optimal price associated with the financial product, wherein the optimal price is estimated based on the plurality of attributes, the plurality of price parameters, the price conversion probability measure and the business measure parameter specified by the user (¶053, 060-062, 070, Fig. 6).

As to claim 29, Munoz discloses wherein the input screen further comprises permitting the user to view and edit the plurality of attributes related to the financial product (¶022-23).

As to claim 30, Munoz discloses wherein the plurality of attributes comprise customer attributes and account attributes associated with the financial product (¶022-23).

As to claim 31, Munoz discloses wherein the plurality of price parameters comprise a price conversion rate parameter, a price rate parameter, a price term parameter, and a price processing parameter associated with the financial product (¶045-050).

As to claim 32, Munoz discloses wherein the business measure parameter comprises at least one of a contributed value measure, a volume measure, and an interest volume measure associated with the financial product (§052, Fig. 1).

As to claim 33, Munoz discloses wherein the price conversion probability measure is a measure of a propensity of response to a price associated with the financial product (§052, Fig. 1).

As to claim 34, Munoz discloses wherein the simulation screen further comprises permitting the user to select a segmentation parameter associated with the financial product (§45-050).

As to claim 35, Munoz discloses wherein the segmentation parameter is a reflection of a plurality of demographic characteristics related to a plurality of customers associated with the financial product (§045-050).

As to claim 36, Munoz discloses wherein the plurality of attributes, the plurality of price parameters, the price conversion probability measure and the business measure parameter specified by the user are provided to an optimized price decision engine, wherein the optimized price decision engine estimates the optimal price based on the plurality of attributes, the plurality of price parameters, the price conversion probability measure, the business measure parameter, and the segmentation parameter (§053, 060-062, 070, Fig. 6).

As to claim 37, Munoz discloses wherein the optimized price decision engine utilizes a regression model to estimate the optimal price (§064-66).



As to claim 38, Munoz discloses wherein the output screen further comprises displaying a screen for viewing the effect of the estimated optimal price on the business measure parameter graphically (Fig. 3).

### ***Response to Arguments***

5. Examiner withdraws the 101 rejections to all the claims in light of Applicant's amendments.
6. Applicant's arguments with respect to the art rejections of claims 1-11 and 18-38 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SETH WEIS whose telephone number is (571)272-1882. The examiner can normally be reached on 8:30 to 5, Monday - Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Kyle can be reached on (571) 272-6746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SETH WEIS/  
Examiner, Art Unit 3695

/Charles R. Kyle/  
Supervisory Patent Examiner, Art Unit 3695